## WHAT IS CLAIMED IS:

1. A method for wireless transmission of a control command from a transmission element to a measuring probe with electromagnetic signals, the control command including at least one bit sequence, the bit sequence including high bits and at least one low bit, comprising:

generating the high bits in accordance with an enveloping curve of a plurality of electromagnetic signals recurring with a carrier frequency; and

transmitting one low bit between two high bits within one bit sequence.

- 2. The method according to claim 1, wherein the carrier frequency is lower than  $50\ \mathrm{kHz}$ .
- 3. The method according to claim 1, wherein the carrier frequency is lower than  $5\ \mathrm{kHz}$ .
- 4. The method according to claim 1, further comprising generating the enveloping curve in accordance with at least eight electromagnetic signals recurring with the carrier frequency.
- 5. The method according to claim 1, wherein the electromagnetic signals include infrared light pulses.
- 6. The method according to claim 1, wherein the control command includes a plurality of bit sequences transmitted in series.
- 7. The method according to claim 1, further comprising: converting the electromagnetic signals into one of pulsed electric currents and voltages in a receiver element of a probe system; and

digitizing the one of the pulsed electric currents and voltages.

- 8. The method according to claim 7, wherein the electromagnetic signals are converted in the converting step in the measuring probe.
- 9. The method according go claim 1, further comprising triggering, by the control command, one of an activation of the measuring probe from a stand-by state and a deactivation of the measuring probe into the stand-by state.
- 10. The method according to claim 9, wherein a first control command triggers the activation of the measuring probe and a different control command triggers deactivation of the measuring probe.
- 11. The method according to claim 1, wherein the bit sequence includes blocks of high bits having different temporal lengths.
- 12. A device for wireless transmission of a control command from a transmission element to a measuring probe with electromagnetic signals, the control command including at least one bit sequence, the bit sequence including high bits and at least one low bit, comprising:

an arrangement configured to generate the high bits in accordance with an enveloping curve of a plurality of electromagnetic signals recurring with a carrier frequency; and

an arrangement configured to transmit one low bit between two high bits within one bit sequence.

13. A device for wireless transmission of a control command from a transmission element to a measuring probe with electromagnetic signals, the control command including at least one bit sequence, the bit sequence including high bits and at least one low bit, comprising:

NY01 652066 13

means for generating the high bits in accordance with an enveloping curve of a plurality of electromagnetic signals recurring with a carrier frequency; and

means for transmitting one low bit between two high bits within one bit sequence.

NY01 652066 14